

## **REMARKS**

Claims 3 and 13-18 have been amended. Claim 19 has been added. Claims 15-18 have been withdrawn from consideration. Claims 1-19 are pending in the present application. No claim is allowed.

The applicant confirms the election of claims 1-14. New claim 19 is within the elected group.

The Examiner objected to the abstract because the abstract is two paragraphs. The abstract has been amended accordingly.

### **The Rejections under 35 U.S.C. § 112, Second Paragraph**

The Examiner rejected claims 3-7 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated that in claim 3, line 1, the limitation "wherein the stack" has an insufficient antecedent basis. The Examiner stated that the recitation of "stack" is given in the preamble and therefore has no patentable weight. Claim 3 has been amended accordingly.

### **The Rejections under 35 U.S.C. § 102(b)**

Claims 1-5, 7-9, and 12-14 were rejected under 35 U.S.C. 102(b) as being anticipated by Lenz et al. (U.S. Patent No. 5,534,751). Regarding claim 1, Lenz et al. does not provide an intended operation using fluorine and ammonia. Page 2, lines 28-32, of the application states that in prior art devices fluorine and ammonia together, would contaminate the process chamber, and therefore such a combination was avoided. Nothing in Lenz et al. discloses the use of fluorine and ammonia together. Therefore the intended use of Lenz et al. would not have fluorine and ammonia. In addition, the last paragraph of MPEP 2115 states that these cases are limited to claims directed to machinery which works upon an article or material in its intended use. The apparatus does not work "on" fluorine or ammonia (as discussed in MPEP 2115), but instead uses fluorine and ammonia to work "on" the substrate. Therefore according to the applicants' understanding of MPEP 2115, it is the substrate that has no significance. In addition, claim 1 positively recites a fluorine containing gas source and an ammonia containing gas source. Lenz does not disclose a fluorine gas source and an ammonia gas source. For at least these reasons, claim 1 is not anticipated by Lenz.

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Dependent claims 2-5, 7-9, and 12-14 are also patentably distinct from Lenz et al. for at least the same reasons as those recited above for claim 1, upon which they ultimately depend. These dependent claims recite additional limitations that further distinguish these dependent claims from the cited references. For example, claims 7 and 14 recite that the exhaust system is able to maintain a pressure below 300 mTorr within the chamber walls. The Examiner failed to point out anything in Lenz et al. that discloses this feature. Claim 12, further recites that the upper and lower electrode are spaced apart by a distance of less than 2.0 cm. For at least these reasons, claims 2-5, 7-9, and 12-14 are not anticipated by Lenz et al.

#### **The Rejections under 35 U.S.C. § 103(a)**

Claims 6, 10, 11, and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lenz et al. (U.S. Patent No. 5,534,751) in view of Westendrop et al. (U.S. Patent No. 5,565,036). The Examiner stated that Westendrop et al. teaches electrode spacing between 1-10 mm and that such a spacing provides a high deposition rate. It would not be obvious to combine the closely spaced electrodes of Westendrop et al. in the device of Lenz et al. The high deposition rates of Westendrop et al. do not provide motivation to use them in Lenz et al., since Lenz et al. is for plasma etching, as stated in the title. Since Lenz et al. is used for etching, high deposition rates is not desirable. For at least these reasons, claims 6, 10, 11, and 12 are not made obvious by Lenz et al. in view of Westendrop et al.

In view of the foregoing, it is respectfully submitted that the pending claims are patentable over the art cited by the Examiner. Therefore, it is respectfully requested that the rejections under 35 U.S.C. §112, 35 U.S.C. §102(b), and 35 U.S.C. §103(a) be withdrawn and the claims allowed.

Applicants believe that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

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If any fees are due in connection with the filing of this Amendment, the commissioner is authorized to deduct such fees from the undersigned's Deposit Account No. 50-0388.

Respectfully submitted,  
BEYER WEAVER & THOMAS, LLP

A handwritten signature in black ink, appearing to read "Michael Lee", written in a cursive style.

Michael Lee  
Reg. No. 31,846

P.O. Box 778  
Berkeley, CA 94704-0778

Telephone: (831) 655-2300  
Facsimile: (831) 655-4288

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